

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings, of Claims in the subject Patent Application.

Listing of Claims:

1. (Currently Amended) A control device for controlling a hydrogen flow from at least one hydrogen storage canister accommodated in a canister containing chamber, comprising:

a heating device, which is supplied with a heating fuel by a heating fuel supplying pipeline in communication with a heating fuel storage tank for heating up the canister containing chamber, said heating device including a coiled pipe disposed adjacent to the at least one hydrogen storage canister on an inner surface of said canister containing chamber;

a blowing device, for providing an air flow via an air flow leading pipe to the canister containing chamber;

at least one temperature sensor, for detecting an internal temperature of the canister containing chamber and generating a temperature signal; and

a controller with a microprocessor for controlling the heating device and the blowing device in correspondence to the temperature signal generated by the temperature sensor, and thereby controlling the hydrogen flow discharged from the hydrogen storage canisters via a hydrogen supplying pipeline.

2. (Original) The control device as claimed in Claim 1, wherein the microprocessor is further coupled with a parameter storage unit for storage of at least one parameter.

3. (Original) The control device as claimed in Claim 2, wherein the parameters stored in the parameter storage unit comprises a temperature reference, a hydrogen flow reference and an air flow reference.

4. (Original) The control device as claimed in Claim 1, wherein the microprocessor is further coupled with a setting unit for setting at least one parameter to be stored in the parameter storage unit.

5. (Original) The control device as claimed in Claim 1, further comprising a pre-heating device for pre-heating the heating fuel in the heating fuel supplying pipeline.

6. (Original) The control device as claimed in Claim 1, further comprising a heating fuel level detector for detecting a stock of the heating fuel in the heating fuel storage tank and generating a heating fuel stock signal to the microprocessor.

7. (Original) The control device as claimed in Claim 1, wherein the heating

fuel is methanol.

8. (Original) The control device as claimed in Claim 1, wherein the heating fuel supplying pipeline further comprises a control valve which is driven by the microprocessor to regulate the heating fuel supplied to the heating device.

9. (Original) The control device as claimed in Claim 8, wherein the control valve is a proportion integral derivative valve.

10. (Original) The control device as claimed in Claim 1, wherein the hydrogen supplying pipeline further comprises a flow meter for detecting the hydrogen flow of the hydrogen flowing in the hydrogen supplying pipeline.

11. (Original) The control device as claimed in Claim 1, wherein the microprocessor transmits an air flow control signal via a driving circuit to the blowing device for controlling the air flow.

12. (Original) The control device as claimed in Claim 1, wherein the heating device comprises:

a catalyst bed, arranging in the inner space of the canister containing chamber, having a heating gas inflow end and a heating gas outflow end; and

a nozzle section, which has an inflow end in communication with the air flow leading pipe for conveying the air flow into the nozzle section, an outflow end in communication with a heating gas drawing pipe connecting to the heating gas inflow end of the catalyst bed, and a heating fuel inlet connecting to the heating fuel supplying pipeline;

wherein when the air flow flows through the nozzle section, the heating fuel in the heating fuel supplying pipeline is sucked into the nozzle section to mix with the air flow forming an atomized heating gas, the atomized heating gas being further supplied via the heating gas drawing pipe to the catalyst bed to generate a hot gas, so that the hydrogen storage canister contained in the canister containing chamber is heated to discharge hydrogen.

13. (Currently Amended) The control device as claimed in Claim 12, ~~wherein the heating device further comprises a coiled pipe around an inner surface of the canister containing chamber,~~ one end of the coiled pipe being connected to the heating fuel supplying pipeline and the other end being connecting to a heating fuel inlet at the nozzle section, such that the heating fuel is conveyed from the heating fuel supplying pipeline via the coiled pipe and the nozzle section to the catalyst bed where the heating fuel is combusted to generate a hot gas for heating the heating fuel in the coiled pipe.